

P **Cucurbita pepo**

Common Name(s)

Pumpkin

How Used

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Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	(+)-CIS-ABSCISIC-ACID	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	(+)-DEHYDROVOMIFOLIOL	Seed	--	0.5		
0	(+)-DEHYDROVOMIFOLIOL	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	(+)-TRANS-2-ABSCISIC-ACID	Seed	--	0.05		
0	(+)-TRANS-ABSCISIC-ACID	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	(+)-VOMIFOLIOL	Seed	--	--		
0	(+)-VOMIFOLIOL	Plant	--	--		
0	1-O-FERULOYL-BETA-D-GLUCOSE	Fruit	--	--		
0	1-O-P-COUMAROYL-BETA-D-GLUCOSE	Fruit	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	2,4-METHYLENE-CHOLESTEROL	Seed	--	--		
0	2-CARBOXYARABINITOL	Leaf	--	--		
0	22-DIHYDRO-SPINASTEROL	Seed	--	--		
0	22-DIHYDROBRASSICASTEROL	Seed	--	--		
0	24-BETA-ETHYL-25(27)-DEHYDROLATHOSTEROL	Seed	--	--		
0	24-ETHYL-5-ALPHA-CHOLESTA-5,22-DIEN-3-BETA-OL	Seed	--	--		
0	24-ETHYL-5-ALPHA-CHOLESTA-7,22,25-TRIEN-3-BETA-OL	Seed	--	--		
0	24-ETHYL-5-ALPHA-CHOLESTA-7,25-DIEN-3-BETA-OL	Seed	--	--		
0	24-METHYL-CHOLEST-7-EN-3-BETA-OL	Seed	--	--		
0	24-METHYL-LATHOSTEROL	Seed	--	--		
0	24ALPHA-ETHYLLATHOSTEROL	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	25(27)-DEHYDRO-CHONDRIASTEROL	Seed	--	--		
0	25(27)-DEHYDRO-FUNGISTEROL	Seed	--	--		
0	25(27)-DEHYDRO-PORIFERASTEROL	Seed	--	--		
0	5-ALPHA-STIGMASTERA-7,25-DIEN-3-BETA-OL	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
1	7BETA,12ALPHA-DIHYDROXYKAURENOLIDE	Seed	--	--	Jeffery B. Harborne and H. Baxter, eds.	1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	9,10-DIHYDROXY-OCTADEC-12-ENOIC-ACID	Seed	--	0.5		
0	ABSCISIC-ACID	Seed	--	0.03	-1.1527176372041539	
11	ADENINE	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
28	ADENOSINE	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
3	ALANINE	Seed	11580	12441	3.0321935802284528	
3	ALANINE	Fruit	280	3333	-0.14718903027260638	USDA's Ag Handbook 8 and sequelae)
0	ALPHA-AMINO-ADIPIC-ACID	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	ALPHA-AMINO-BUTYRIC-ACID	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	ALPHA-KETO-BETA-METHYL-BUTYRIC-ACID	Juice	100	100		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-KETO-BETA-METHYL-VALERAINIC-ACID	Juice	180	180		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	ALPHA-LINOLENIC-ACID	Flower	20	410		USDA's Ag Handbook 8 and sequelae)
15	ALPHA-LINOLENIC-ACID	Fruit	30	357	-0.9907958760065699	USDA's Ag Handbook 8 and sequelae)

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
15	ALPHA-LINOLENIC-ACID	Seed	1810	1945	-0.27664797897567234	
2	ALPHA-SPINASTEROL	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
2	ALPHA-SPINASTEROL	Seed	--	--		
0	ALPHA-SPINASTERYL-BETA-D-GLUCOSIDE	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
32	ALPHA-TOCOPHEROL	Stem	--	--		
32	ALPHA-TOCOPHEROL	Fruit	10	119	0.7100689146464441	USDA's Ag Handbook 8 and sequelae)
32	ALPHA-TOCOPHEROL	Leaf	--	--		
5	ALUMINUM	Seed	11	11	-0.34533998793343856	
0	APIGENIN-7-O-BETA-D-GLUCOSYL-6-C-GLUCOSIDE	Shoot	--	--		
0	ARACHIDIC-ACID	Seed	200	3445	-0.31855492120796164	
14	ARGININE	Fruit	370	6429	0.5652801717537763	
14	ARGININE	Seed	40330	43328	2.3983290974128795	
0	ASCORBATE-OXIDASE	Fruit	--	--		
112	ASCORBIC-ACID	Flower	280	5773	0.9425150784106588	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Fruit	90	1071	-0.21789744626053537	USDA's Ag Handbook 8 and sequelae)
0	ASH	Fruit	7500	95238	0.9988933412124088	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	ASH	Seed	47530	70000	0.6653137568970965	
0	ASH	Flower	4800	98970	0.6935813306629863	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Fruit	1020	12143	0.26070734221460257	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Seed	24770	26612	1.6415504064239652	
0	AUROXANTHIN	Flower	--	--		
0	AVENASTEROL	Seed	--	--		
0	BETA-AMINO-ISOBUTYRIC-ACID	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
53	BETA-CAROTENE	Flower	12	240	3.0920238881774016	
53	BETA-CAROTENE	Fruit	9.6	114	0.06955931690572935	USDA's Ag Handbook 8 and sequelae)
53	BETA-CAROTENE	Seed	2	2.5	-0.27303542142102893	
2	BETA-CRYPTOXANTHIN	Flower	--	--		
0	BETA-HYDROXYBUTYRIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-PYRAZOALANINE	Seed	--	--		
47	BETA-SITOSTEROL	Fruit	--	120	-0.6365753174526275	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
47	BETA-SITOSTEROL	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-TOCOPHEROL	Seed	--	--		
4	BORON	Fruit	1	1	-0.7837717353775396	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
102	CAFFEIC-ACID	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	CALCIUM	Flower	390	8041	0.6281259672638968	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Fruit	210	2500	-0.31297715768782586	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Seed	240	474	-0.21789520636618454	
2	CAMPESTEROL	Seed	--	--		
0	CARBOHYDRATES	Flower	32800	676290	0.08007862121719332	USDA's Ag Handbook 8 and sequelae)
0	CARBOHYDRATES	Fruit	65000	773809	-0.04851627057819577	USDA's Ag Handbook 8 and sequelae)
0	CARBOHYDRATES	Seed	60000	191341	-1.319678638609645	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	CHLOROPHYLL-B	Plant	--	--		
1	CHOLESTEROL	Plant	--	--		
0	CHONDRILLASTEROL	Seed	--	--		
24	CHROMIUM	Seed	17	17	1.7942136570807767	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CLEROSTEROL	Seed	--	--		
2	COBALT	Seed	143	143	5.996171444060427	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CODECARBOXYLASE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CODISTEROL	Seed	--	--		
12	COPPER	Seed	14	15	0.9238769354282156	
2	CRYPTOXANTHIN	Seed	--	--		
2	CRYPTOXANTHIN	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	CUCURBIC-ACID	Seed	--	1.2		
2	CUCURBIC-ACID	Plant	--	--		
0	CUCURBIC-ACID-3-O-BETA-D-GLUCOSIDE	Seed	--	7		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	CUCURBIC-ACID-3-O-BETA-D-GLUCOSIDE-METHYL-ESTER	Seed	--	1		
0	CUCURBIC-ACID-GLUCOSIDE	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	CUCURBIC-ACID-METHYL-ESTER	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	CUCURBIC-ACID-METHYL-ESTER-3-O-BETA-D-GLUCOSIDE	Seed	--	--		
0	CUCURBITA-RIBOSOMAL-INACTIVATING-PROTEIN(MW-30000)	Seed	--	--		
4	CUCURBITACIN-D	Seed	--	--		
6	CUCURBITACIN-I	Seed	--	--		
0	CUCURBITAXANTHIN	Fruit	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
3	CUCURBITIN	Seed	16600	66300		
0	CUCURBITOL	Seed	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
0	CUCUROIC-ACID-3-O-BETA-D-GLUCOSIDE	Seed	--	--		
2	CYSTINE	Seed	3010	3234	0.05846459641621995	USDA's Ag Handbook 8 and sequelae)
2	CYSTINE	Fruit	30	700	-0.3455775263586415	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	DEHYDROASCORBIC-ACID	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELTA-5-STEROLS	Seed	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	DELTA-7,22,25(27)-STIGMASTATRIEN-3-BETA-OL	Seed	--	--		
0	DELTA-7,22,25(27)-STIGMASTATRIEN-3-BETA-OL-GLYCOSIDE	Seed	--	--		
0	DELTA-7,25(27)-STIGMASTADIEN-3-BETA-OL	Seed	--	--		
0	DELTA-7,25(27)-STIGMASTADIEN-3-BETA-OL-GLYCOSIDE	Seed	--	--		
0	DELTA-7-ERGOSTENOL	Seed	--	--		
0	DELTA-8-STEROLS	Seed	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	DELTA-HYDROXYLYSINE	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	DL-CITRULLIN	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EDESTINE	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EICOSADIENOIC-ACID	Seed	500	3095	-1	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	ETHYL-ASPARAGINE	Seed	--	--		
0	FAT	Fruit	1000	11905	-0.5503226574053797	USDA's Ag Handbook 8 and sequelae)
0	FAT	Seed	300000	520000	1.3411346315870767	
0	FAT	Flower	700	14430	-0.682532632511201	USDA's Ag Handbook 8 and sequelae)
61	FERULIC-ACID	Plant	--	--		
15	FIBER	Seed	19690	26538	-0.8546880226433043	
15	FIBER	Flower	6300	130000	-0.01946664238399821	USDA's Ag Handbook 8 and sequelae)
15	FIBER	Fruit	11000	130952	-0.10120041632692214	USDA's Ag Handbook 8 and sequelae)
0	FIXED-OIL	Seed	--	--		
0	FLAVOXANTHIN	Juice	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FLAVOXANTHIN	Flower	--	--		
22	GABA	Seed	--	--		
0	GADOLEIC-ACID	Seed	2740	6055	0.17833510249533263	
22	GAMMA-AMINOBUTYRIC-ACID	Seed	--	--		
14	GAMMA-TOCOPHEROL	Seed	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	GIBBERELLIN-A-29	Seed	--	1		
0	GIBBERELLIN-A39	Seed	--	--		
0	GIBBERELLIN-A39	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	GIBBERELLIN-A48	Seed	--	0.5		
0	GIBBERELLIN-A48	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
0	GIBBERELLIN-A49	Seed	--	0.06		
0	GIBBERELLIN-A49	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite.	1991.
8	GLUTAMIC-ACID	Fruit	1840	35000	1.6935719269179679	
8	GLUTAMIC-ACID	Seed	43150	46358	2.535958532664187	
7	GLUTATHIONE	Root	--	--		
0	GLUTINOL	Flower	--	--	Chemical Constituents of Oriental Herbs (3 diff. books)	
12	GLYCINE	Fruit	270	8000	1.700314241568018	
12	GLYCINE	Seed	17960	19295	4.087033113761383	
0	GLYOXALIC-ACID	Juice	200	200	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin,	1969-1979.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	GUANOSINE	Sprout Seedling	-- --			List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	HISTIDINE	Fruit	140	1905	0.13488863306666263	
7	HISTIDINE	Seed	6810	7316	0.9280525151100297	
0	HYDROXYBRENZTRAUBEN-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	IRON	Flower	7	144	-0.15678269834846398	USDA's Ag Handbook 8 and sequelae)
6	IRON	Seed	86	172	0.2286303167080437	
0	ISOFUCOSTEROL	Seed	--	--		
3	ISOLEUCINE	Fruit	310	3690	0.015676544764510515	USDA's Ag Handbook 8 and sequelae)
3	ISOLEUCINE	Seed	12640	13580	1.1909618444245489	
0	ISORHAMNETIN-3-O-RUTINOSIDE-4'-O-RHAMNOside	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
75	KAEMPFEROL	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	KILOCALORIES	Flower	150	3092	-0.6127486372028212	USDA's Ag Handbook 8 and sequelae)

	Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	KILOCALORIES	Fruit	220	3095	-0.8589758015879105		
0	KILOCALORIES	Seed	2730	5812	0.877506538168353		
7	LAURIC-ACID	Seed	440	472	-0.5080982546591932	USDA's Ag Handbook 8 and sequelae)	
7	LAURIC-ACID	Flower	10	205	1	USDA's Ag Handbook 8 and sequelae)	
7	LAURIC-ACID	Fruit	10	119	-0.4440571804777033	USDA's Ag Handbook 8 and sequelae)	
20	LECITHIN	Seed	4000	4000	-0.6301994798460713	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
2	LEUCINE	Fruit	460	5476	0.07968869127701686	USDA's Ag Handbook 8 and sequelae)	
2	LEUCINE	Seed	20790	22336	1.7950676234415441		
27	LINOLEIC-ACID	Fruit	20	238	-0.35204205108428127	USDA's Ag Handbook 8 and sequelae)	
27	LINOLEIC-ACID	Seed	33025	222411	1.309872196741342		
27	LINOLEIC-ACID	Flower	20	410	-1.6272593881283386	USDA's Ag Handbook 8 and sequelae)	
21	LUPEOL	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
15	LUTEIN	Flower	--	--			

	Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
4	LYSINE	Seed	15580	19693	1.221995231537649		
4	LYSINE	Fruit	470	6429	0.5994486783586378		
0	M-CARBOXYPHENYLALANINE	Seed	--	--			
65	MAGNESIUM	Flower	240	4950	1.5450101513045418	USDA's Ag Handbook 8 and sequelae)	
65	MAGNESIUM	Fruit	120	1429	-0.32448187054974087	USDA's Ag Handbook 8 and sequelae)	
65	MAGNESIUM	Seed	5140	5748	2.194307935408216		
14	MANGANESE	Seed	40	100	0.5789731987465522		
18	MANNITOL	Fruit	150000	200000	1.0000000000000002	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
15	METHIONINE	Fruit	110	1310	0.43282328158125916		
15	METHIONINE	Seed	5195	5920	0.9218941593170248		
13	MUFA	Seed	142580	153180	0.31654088954333737	USDA's Ag Handbook 8 and sequelae)	
13	MUFA	Flower	90	1855	0.9258200997725515	USDA's Ag Handbook 8 and sequelae)	
13	MUFA	Fruit	130	1548	-0.23146990776316503	USDA's Ag Handbook 8 and sequelae)	
0	MUTATOXANTHIN	Flower	--	--			

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
6	MYRISTIC-ACID		Flower 50	1030	1	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID		Fruit 60	714	-0.23546018231743712	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID		Seed 200	559	-0.28868542415273796	
2	NEOXANTHIN		Flower --	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
39	NIACIN		Fruit 6	71	0.1377183481002988	USDA's Ag Handbook 8 and sequelae)
39	NIACIN		Seed 14	22	-0.6252053381989392	
39	NIACIN		Flower 7	142	0.4676432168231639	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID		Flower 40	825	-0.5618910849321588	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID		Fruit 60	714	-0.4752421241865289	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID		Seed 70000	151977	0.949202915624086	
5	ORNITHINE		Flower --	--		Chemical Constituents of Oriental Herbs (3 diff. books)
9	OXALIC-ACID		Juice 400	400		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	OXYCEROTIC-ACID	Seed	--	--		
0	OXYCEROTINIC-ACID	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	PALMITIC-ACID	Seed	44800	60292	0.6318622321962477	
13	PALMITIC-ACID	Flower	260	5360	1.5550797314583331	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Fruit	370	4405	-0.29695907602866173	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Flower	50	1030		USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Fruit	60	714	-0.21493257540335348	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Seed	990	1064	-0.2729267504653296	USDA's Ag Handbook 8 and sequelae)
24	PECTIN	Seed	--	30000	-0.08222588577632582	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	PEPONIN	Seed	--	--		
7	PHENYLALANINE	Seed	12220	13128	1.3499663619426168	
7	PHENYLALANINE	Fruit	300	3810	0.16793014424265534	
3	PHEOPHYTIN-A	Plant	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation	
0	PHOSPHOLIPIDS		Seed	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
4	PHOSPHORUS		Flower	490	10100	2.686824447078974	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS		Fruit	440	5238	0.6141634764064872	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS		Seed	10600	12982	2.015938641351039	
9	PHYTIC-ACID		Seed	15000	22000	0.3298576936665281	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	PHYTOSTEROLS		Fruit	120	1428	0.621756970445516	USDA's Ag Handbook 8 and sequelae)
0	PLASTOCYANIN		Plant	--	--		
14	POTASSIUM		Flower	1730	35670	1.6822865837086274	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM		Fruit	3400	40476	1.9959201140166747	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM		Seed	5540	8670	1.0931328980431534	
0	PROLINE		Seed	10000	10743	-0.11647292737143848	USDA's Ag Handbook 8 and sequelae)
0	PROLINE		Fruit	260	17100	3.5944692903421607	
0	PROTEIN		Fruit	10000	140000	0.4088853346010846	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	PROTEIN	Seed	86000	271797	2.4569770193242495	
0	PROTEINASE-INHIBITOR	Seed	--	--		
4	PUFA	Seed	209040	224581	0.9047155639598008	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Flower	40	825	-1.0752762105747442	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Fruit	50	595	-0.7969298370757578	USDA's Ag Handbook 8 and sequelae)
176	QUERCETIN	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	RHAMNAZIN-3-RUTINOSIDE	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
15	RIBOFLAVIN	Flower	0.7	15	2.063147597581711	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Fruit	1.1	13.1	1.732758201315725	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Seed	2.7	4.9	0.5272746510341323	
7	SALICYLATES	Fruit	1	12	-0.3023324705158085	
34	SALICYLIC-ACID	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	SCHOTTENOL	Seed	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
60	SELENIUM	Seed	0.08	0.4	-0.2598134032604234	
1	SERINE	Fruit	440	6100	0.8674481392454163	
1	SERINE	Seed	11480	12333	1.772899923635598	
0	SFA	Fruit	520	6190	-0.2432713408404038	USDA's Ag Handbook 8 and sequelae)
0	SFA	Seed	86740	93180	0.3371201440997354	USDA's Ag Handbook 8 and sequelae)
0	SFA	Flower	360	7425	1.3802107188371535	USDA's Ag Handbook 8 and sequelae)
4	SILICON	Seed	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	SODIUM	Flower	50	1030	-0.014204700953778359	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Fruit	10	119	-0.17266615010321906	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Seed	180	193	-0.4093447105551685	
0	SPINASTEROL	Seed	--	--		
10	SQUALENE	Seed	--	--		
8	STEARIC-ACID	Flower	20	410	0.8880673443552061	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Fruit	30	357	-0.2555459149836314	USDA's Ag Handbook 8 and sequelae)

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
8	STEARIC-ACID	Seed	22670	30200	0.10091267774493513	
0	STEROIDS	Seed	--	10000	1	Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals.</i> CRC Press. Boca Raton, FL. 566 pp.
0	STIGMAST-7-ENOL	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	STIGMAST-7-ENYL-D-GLUCOSIDE	Flower	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
12	STIGMASTEROL	Seed	--	--		
14	SUCROSE	Seed	14000	14000	-0.4987245937681623	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
31	THIAMIN	Flower	0.4	8.6	0.9634191805054287	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Fruit	0.5	5.9	0.07261616317741888	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Seed	1.9	3.7	-0.6881088248838246	
4	THREONINE	Seed	6205	9701	0.3497572127196895	
4	THREONINE	Fruit	250	3452	0.18053609503349416	
4	TIN	Seed	23	23	2.787245020652214	Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
15	TRIGONELLINE	Sprout Seedling	-- --			List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
29	TRYPTOPHAN	Fruit	120	1800	1.3326475370102935	
29	TRYPTOPHAN	Seed	4310	4630	0.44501745215638666	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Fruit	130	5000	1.0696133056017336	
8	TYROSINE	Seed	9275	10948	1.041001842799917	
0	UREASE	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	VALINE	Fruit	350	4167	-0.059422351858102324	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Seed	19720	21186	1.3194683797013413	
2	VIOLAXANTHIN	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	VOMIFOLIOL	Seed	--	0.16		
0	WATER	Fruit	916000	916000	0.6323183096832936	USDA's Ag Handbook 8 and sequelae)
0	WATER	Seed	65200	73110	-0.5928698155574392	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
3	XANTHOPHYLL	Flower	--	--	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.	
5	ZEAXANTHIN	Flower	--	--		
77	ZINC	Seed	75	83	4.396731781476845	